




#779

MAGELLAN

ALT-EDR

89-033B-01a

89-033B-01b



MAGELLAN

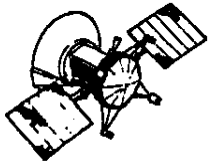
ALT-EDR

89-033B-01a

This data set consists of 9-Track, 6250 Tapes, and CD-ROM Write-Once disks. The data were originally submitted on 869 9-Track tapes. The data were resubmitted on 71 CD-ROM'S by MIT. The CD'S were written in ASCII format. The DD and the KD numbers are as follows:

DD 088306 - 088950
DD 096140 - 096206
DD 096210
DD 100103 - 100254
DD 104401 - 104403
DD 107259

KD 000786 - 000856



Massachusetts Institute of Technology Center for Space Research

Cambridge, MA 02139

Radar Astronomy Group

Room 37-601

Tel: (617)-253-6485

Datafax: (617)-253-0861

Tuesday, July 26, 1994

Data Ingest
National Space Sciences Data Center
Code 633
Goddard Space Flight Center
Greenbelt, MD 20771
Attn: Ralph Post

Dear Ralph,

This is a delivery of 71 CD-WO disks containing an archival copy of the Magellan ALT-EDR dataset that was delivered to NSSDC on 1/2" CCT last year. This CD-WO version differs in the following respects:

- Addition of PDS label files and catalog templates.
- Correction or identification of all known errors within the data files themselves.
- Omission of all duplicate data sets—only the "best" of each orbit is retained.

We are sending catalog information to the PDS Geosciences Node in St. Louis so that these products will appear in future versions of their Magellan Detailed Level Catalog. I'm enclosing a simple 2-page description and a printed copy of the full SIS that is recorded on each disk in the files named `alteredcd.txt` (ASCII) and `alteredcd.ps` (PostScript) in the document directory. Please let us know if you'd like any ancillary information to assist in filling your own catalogs.

Expect a companion dataset from us, the Magellan C-BIDR on 124 CD-WO disks, which should be ready to ship within 2 months. We'll keep you posted on its progress.

Sincerely,

Dr. Peter G. Ford
Principal Research Scientist

cc: Ray Arvidson, Washington Univ.
Joan Quigley, MIT 37-602

encl: Data description sheet (2 pages)
MIT-MGN-ALTEDRCD SIS v0.7
CD-WO disks MG_3301-MG_3371

DATA SET: MGN V RDRS ALTIMETER EXPERIMENT DATA RECORD ON COMPACT DISK

Data Set Information

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Data Set Id	: MGN-V-RDRS-2-ALT-EDR-V1.0
Processing Level Id	: 2
Start Time	: 1990-09-16
Stop Time	: 1992-09-14
Data Object Type	: TABLE
Data Set Release Date	: 1994-07-01
Producer Institution Name	: CENTER FOR SPACE RESEARCH, MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Software Flag	: N
Detailed Catalog Flag	: N
Processing Start Time	: 1990-09-16
Processing Stop Time	: UNK
Data Set Collection Member Flg	: N

Processing Level Description

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Derived Data - Derived results, as maps, reports, graphs, etc. NASA levels 2 through 5.

Data Set Processing

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Source Data Set Id	: MGN-V-RDRS-1-ODR-V1.0
Cognizant Full Name	: MHR

Description

The Magellan High-Rate Processing System (MHR) consists of a Central Database (CDB) and Telemetry Processing Subsystem (TPS) used to merge Magellan high-rate and subcommutated engineering telemetry and ancillary data files.

Associated Targets

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VENUS

Associated Instruments

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Host:	MAGELLAN (MGN)
Instrument:	RADAR SYSTEM (RDRS)

Parameter Information

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None.

Data Set Description

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ALTEDRCD archive volumes contains Magellan ALT-EDR (Altimeter Experiment Data Record) archive products. They also contains documentation files which describe the ALT-EDRs. Each ALT-EDR data directory contains the raw altimeter data returned from one orbit and the ancillary files necessary to understand the data. The ALT-EDR products archived on these volumes are the exact products released by the Magellan Project. Supporting documentation and label files conform to the Planetary Data System (PDS) Standards, Version 3.0, Jet Propulsion Laboratory (JPL) document JPL D-7669.

Confidence Level Note

The PDS labels on these volumes conform to the Data Dictionary distributed with Release 4.1 of the PDS Toolkit. All TEXT, HEADER, SPICE KERNEL and TABLE objects obey GENERIC PDS standards, except that some TABLE objects are not accompanied by sets of COLUMN sub-objects, in which case format information is included in an accompanying DESCRIPTION element. The PDS Catalog files, *.CAT, conform to the PDS 'streamlined' standards introduced in April 1994.

All *.DAT files in the data directories were copied directly from ALT-EDR product tapes without change, unless otherwise noted in the ERRATA.TXT file in the ROOT directory. Error messages from the PDS label generation routines have been copied to the ERR.TXT files within the data directories. Most errors are concerned with incorrect SFDU lengths, and the object pointers in the label files should be used in preference to the object lengths recorded in the *.DAT files themselves.

Reference

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Journal: N/A
Publication Date: 1989
Reference Key ID: WILSON1989

Authors

BETSY WILSON

Citation

Wilson, E., SAR and Altimeter EDR/TEDR Tapes, Project Magellan Software Interface Specification Document TPS-101, Jet Propulsion Laboratory, Pasadena, Calif., Rev. D, 1989.

Reference

=====

Journal: JOURNAL OF GEOPHYSICAL RESEARCH
Publication Date: 1990-06-10
Reference Key ID: SAUNDERSETAL1990

Authors

GORDON H. PETTENGILL
LESLIE J. PIERI
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RAYMOND E. ARVIDSON
W. L. SJOGREN
WILLIAM T. K. JOHNSON

Citation

Saunders, R.S., G.H. Pettengill, R.E. Arvidson, W.L. Sjogren, W.T.K. Johnson, L. Pieri, The Magellan Venus Radar Mapping Mission, Journal of Geophysical Research, 1990, Vol 95, pp. 8339-8335

Inventory Information

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Available from NSSDC

CD-WO Media (WRITE-ONCE COMPACT OPTICAL DISK (CD-WO))

NASA Planetary Data System
Microwave Subnode of the Geosciences Node

Software Interface Specification

MIT-MGN-ALTEDRCD

**Magellan Altimetry Experiment Data Record
on Compact Disk Read-Only Memory**

prepared by

Peter G. Ford

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Massachusetts Institute of Technology
70 Vassar Street
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617-253-6485

Version 0.7
March 31 1994

89-0338-016

MAGELLAN

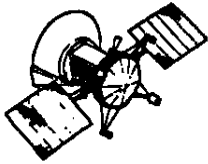
ALT-EDR

89-033B-01b

This data set consists of 9-Track, 6250 Tapes, and CD-ROM Write-Once disks. The data were originally submitted on 1082 9-Track tapes. The data were resubmitted on 124 CD-ROM'S by MIT. The CD'S were written in ASCII format. The DD and the KD numbers are as follows:

DD 088951 - 089456
DD 089497 - 089723
DD 096207 - 096270
DD 097211 - 097215
DD 100255 - 100498
DD 104404 - 104439

KD 000857 - 000980



Massachusetts Institute of Technology Center for Space Research

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Friday, October 14, 1994

Data Ingest
National Space Sciences Data Center
Code 633
Goddard Space Flight Center
Greenbelt, MD 20771
Attn: Ralph Post

Dear Ralph,

This is a delivery of 124 CD-WO disks containing an archival copy of the Magellan C-BIDR dataset that was delivered to NSSDC on 1/2" CCT last year. This CD-WO version differs in the following respects:

- Addition of PDS label files and catalog templates.
- Correction or identification of all known errors within the data files themselves.
- Omission of all duplicate data sets—only the "best" of each orbit is retained.

We are sending catalog information to the PDS Geosciences Node in St. Louis so that these products will appear in future versions of their Magellan Detailed Level Catalog. I'm enclosing a simple 3-page description and a printed copy of the full SIS that is recorded on each disk in the files named `cbidrcd.txt` (ASCII) and `cbidrcd.ps` (PostScript) in the document directory. Please let us know if you'd like any ancillary information to assist in filling your own catalogs.

I'd appreciate receiving written confirmation that these products arrived safely without any obvious signs of damage.

Sincerely,

Dr. Peter G. Ford
Principal Research Scientist

cc: Ray Arvidson, Washington Univ.
Joan Quigley, MIT 37-602

encl: Data description sheet (3 pages)
MIT-MGN-CBIDRCD SIS v1.0
CD-WO disks MG_3101-MG_3224

DATA SET: MGN V RDRS COMPRESSED BASIC IMAGE DATA RECORD ON COMPACT DISK

Data Set Information

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Data Set Id : MGN-V-RDRS-5-C-BIDR-V1.0
Processing Level Id : 5
Start Time : 1990-09-15
Stop Time : 1992-09-14
Data Object Type : IMAGE
Data Set Release Date : 1994-07-01
Producer Institution Name : CENTER FOR SPACE RESEARCH,
: MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Software Flag : N
Detailed Catalog Flag : N
Processing Start Time : 1990-09-16
Processing Stop Time : UNK
Data Set Collection Member Flg : N

Processing Level Description

=====

Derived Data - Derived results, as maps, reports, graphs, etc. NASA levels 2 through 5.

Data Set Processing

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Source Data Set Id : MGN-V-RDRS-5-BIDR-FULL-RES-V1.0
Cognizant Full Name : IDPS

Description

The Image Data Processing Subsystem (IDPS) is a component of the Multimission Image Processing System (MIPS). It reads multiple full-resolution (F-BIDR) Magellan image swaths and merges them into a variety of mosaics. During this process, it performs a 3-1 compression of the original 75 meter pixels to 225 meter pixels and saves the result as the Compressed Image Data Record (C-BIDR.)

Associated Targets

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VENUS

Associated Instruments

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Host: MAGELLAN (MGN)
Instrument: RADAR SYSTEM (RDRS)

Parameter Information

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None.

Data Set Description

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CBIDRCD archive volumes contain Magellan C-BIDR (Compressed-Resolution Basic Image Data Record) products, including image and data files. They also contain documentation files which describe the C-BIDRs. Each C-BIDR data directory contains the compressed-resolution radar return for one orbit and the ancillary files necessary to understand the data. The C-BIDR products archived on these volumes are the exact products released by the Magellan Project. Supporting documentation and label files conform to the Planetary Data System (PDS) Standards, Version 3.0, Jet Propulsion Laboratory (JPL) document JPL D-7669.

Confidence Level Note

=====

The PDS labels on these volumes conform to the Data Dictionary distributed with Release 4.1 of the PDS Toolkit. All TEXT, HEADER, SPICE KERNEL, IMAGE, and TABLE objects obey GENERIC PDS standards, except that some TABLE objects are not accompanied by sets of COLUMN sub-objects, in which case format information is included in an accompanying DESCRIPTION element. The PDS Catalog files, *.CAT, conform to the PDS 'streamlined' standards introduced in April 1994.

All *.DAT files in the data directories were copied directly from C-BIDR product tapes without change, unless otherwise noted in the ERRATA.TXT file in the ROOT directory. Error messages from the PDS label generation routines have been copied to the ERR.TXT files within the data directories. Most errors are concerned with gaps in the image files, IM1.DAT and IM2.DAT, or incorrect SFDU lengths. The object pointers in the label files should be used in preference to the object lengths recorded in the *.DAT files themselves.

Software

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Although the IM1.DAT and IM2.DAT files in CBIDRCD data directories represent SAR images, their format is NOT recognized by most popular image processing programs. Two systems that recognize the format are:

* VICAR (Video Image Communication and Retrieval) from COSMIC Inc., University of Georgia, 382 East Broad Street, Athens, GA 30602-4272, tel: 706-542-3265, fax: 706-542-4807, Internet: service@cosmic.uga.edu.

* GIPS (General Image Processing System) from the M.I.T. Software Center, Technology Licensing Office, E32-300, 28 Carleton Street, Cambridge, MA 02139-4307, tel: 617-253-6966, telex: 921473 MITCAM, fax: 617-258-7690, Internet: par@eagle.mit.edu.

Reference

=====

Journal: N/A
Publication Date: 1991
Reference Key ID: IDPS101

Authors

SCOTT LEWICKI

Citation

Compressed-resolution Basic Image Data Record, Rev. C, Scott Lewicki, JPL IDPS-101, May 31, 1991.

Reference

=====

Journal: N/A
Publication Date: 1992
Reference Key ID: SDPS101

Authors

N/A

Citation

Project Magellan Software Interface Specification: Full-
Resolution Basic Image Data Record, Revision E, 31 August 1992.

Reference

=====

Journal: JOURNAL OF GEOPHYSICAL RESEARCH
Publication Date: 1990-06-10
Reference Key ID: SAUNDERSETAL1990

Authors

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WILLIAM T. K. JOHNSON

Citation

Saunders, R.S., G.H. Pettengill, R.E. Arvidson, W.L. Sjogren,
W.T.K. Johnson, L. Pieri, The Magellan Venus Radar Mapping
Mission, Journal of Geophysical Research, 1990, Vol 95, pp.
8339-8335

Inventory Information

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Available from NSSDC

CD-WO Media (WRITE-ONCE COMPACT OPTICAL DISK (CD-WO))

NASA Planetary Data System
Microwave Subnode of the Geosciences Node

Software Interface Specification

MIT-MGN-CBIDRCD

**Magellan Compressed Basic Image Data Record
on Compact Disk Read-Only Memory**

prepared by

Peter G. Ford

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Version 1.0
July 7 1994